Sex and infertility

Part I. Prevalence of psychosexual problems and subjacent factors

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Summary

Data on 514 couples with psychogenic factors affecting their sex lives and fertility showed that the most prevalent problems were lack of sex education, consequences of premarital sex and the problem of infertility *per se*. These factors contributed to psychosexual problems of which the general prevalence was 42% (10,5% women, 13,2% men and 18,3% both husband and wife). The high prevalence of psychosexual problems emphasises the importance of the inclusion of extensive training in sex counselling in the curricula of medical students and the urgent need for sex counselling facilities at training hospitals.

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According to Greenblatt and Karpas,[1] until 40 years ago sex was never discussed and seldom written about. In order to identify factors leading to psychosexual friction and problems connected with infertility and to establish the prevalence of these factors and problems the information accumulated over 8 years in an infertility clinic was evaluated.

Patients and methods

The study group consisted of 514 couples attending the Andrology Unit at Tygerberg Hospital. They were questioned and examined in detail according to a schedule which consisted of registration at the clinic and then four consecutive consultations.[2] Patients were asked two sets of questions; the first applied to their sexual history (Table I) and the second covered their family background and relationships (Table II). The methods of Professor J. Kremer of the Polikliniek voor Vruchtbaarheidsonderzoek, Groningen, The Netherlands (personal communication), and Ford *et al.*[3] together with my personal experience[4] in handling infertile patients over many years formed a reliable background for establishing the required rapport with infertile couples.

Semen specimens obtained at home following the necessary instructions and care were meticulously compared with those patients could produce in the semen room at hospital. If the result of the Sims-Huhner test was poor or negative, the husband and wife were questioned separately to determine — with less embarrassment and feelings of disloyalty to their partner — whether they had any problems in their sexual relationship.

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TABLE I. SEXUAL HISTORY QUESTIONS

Sex education during puberty and adolescence	Previous marriages and divorces
Masturbation during puberty and after marriage	Illegitimate children
Premarital sex	Homosexuality
Honeymoon	Lesbianism
Loveplay	Prostitution
Libido and orgasm*	Sex perversions
Coital dysfunction	Therapeutic and criminal abortions
Coitus positions	Transvestism and transsexualism
Contraceptives	Sexual myths
Extramarital sex	Lack of communication
	Stress and feelings of fear and guilt

*The evaluation of libido and orgasm were calculated according to the number of times out of 10 that libido was experienced and orgasm achieved.

TABLE II. FAMILY BACKGROUND AND RELATIONSHIPS

- Emotions concerning the problem of infertility
- Attitude towards parenthood
- Career-related problems
- Family relations
- Accommodation
- Financial status
- Social life
- Education and social background
- Previous mental trauma
- Impaired health
- Symptoms and signs of neurosis or psychosis

Results

The major factors that could have contributed towards psychosexual problems in this selected group of patients complaining of infertility are set out in Table III. The minor factors and their prevalence appear in Table IV.

TABLE III. MAJOR SEX-RELATED FACTORS AMONG COUPLES COMPLAINING OF INFERTILITY

	Prevalence %	
Factor	Men	Women
Lack of sex education	81,4	55,9
Premarital sex	70,5	56,4
Infertility *per se*	27,2	42,6
Dissatisfaction with occupation	18,3	8,0
Unsatisfactory family life	19,5*	—
Lack of communication	7,2	7,0

*Couples.

TABLE IV. MINOR SEX-RELATED FACTORS AMONG COUPLES COMPLAINING OF INFERTILITY

Factor	Prevalence % Men	Women
Social maladjustment	**4,7**	**2,7**
Neurosis and psychosis	**4,1**	**3,3**
Education and social background	**3,1**	**2,5**
Impaired health	**0,8**	**3,3**
Financial problems	**4,1***	**—**
Undesirable accommodation	**1,4***	**—**
Previous marriages	**0,6**	**1,0**

*Couples.

TABLE V. PREVALENCE OF MAJOR PPs AMONG MEN COMPLAINING OF INFERTILITY

Problem	%
Impaired sexual interest	**68,7**
Erectile dysfunction	**17,1**
Premature ejaculation	**13,5**
Homosexuality	**1,8**

TABLE VI. PREVALENCE OF MAJOR PPs AMONG WOMEN COMPLAINING OF INFERTILITY

Problem	%
Dyspareunia	**50,0**
Impaired sexual interest	**25,6**
Orgasmic dysfunction	**21,8**
Apareunia	**0,4**
Vaginismus	**0,2**
Lesbianism	**0,2**

Psychosexual problems specific to men and women patients are shown in Tables V and VI.

The general prevalence of psychogenic factors (PFs) and psychosexual problems (PPs) was found to be 42,0% in the group of 514 patients complaining of infertility (Fig. 1).

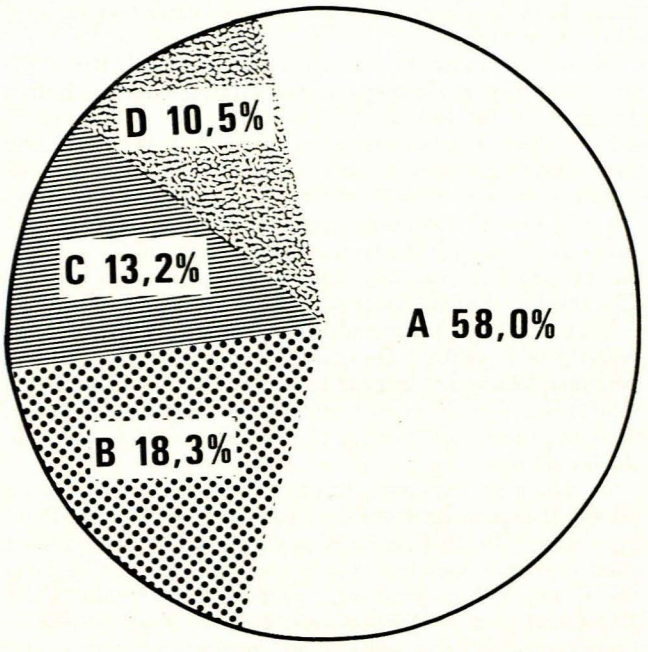

Fig. 1. Schematic presentation of the prevalence of PFs and PPs among couples complaining of infertility (A = no problems or adverse factors, both partners; B = problems and adverse factors, both partners; C = problems and adverse factors, husbands only; D = problems and adverse factors, wives only).

Discussion

Although the factors and problems influencing infertility have been well explored in literature since 1953, authors seldom or never quote their statistical findings with regard to the prevalence of specific factors.[5-13] Noyes and Chapnick[13] for instance, after studying 235 articles about PFs, published a legio of PFs and PPs that could have influenced fertility. Unfortunately the authors they quoted did not give the factors and problems in a sequence of importance and statistical findings are completely lacking. Table III and IV present the findings accumulated from patients complaining of infertility.

The influence of these factors and its end product, PPs in fertility, will be discussed in detail in Part II of this article (see p. 485). The general prevalence of PPs have been published by several authors such as Kleegman and Kaufman,[9] White and Green-Armytage[14] and Sandler[15] who described the general prevalence of PPs as being 25% of patients complaining of infertility. Most of the statistics available, however, are from sexual dysfunction clinics and are estimates only; the figures quoted are Kaplan 25%,[16] Bancroft 30%,[17] Hawton 36%[18] and Crowe *et al.* 48%.[19] Masters and Johnson,[20] however, described the prevalence of PPs among a group of patients who attended a sexual dysfunction clinic as 43,7%. Hawton,[18] however, warned that the findings from different selections or unselected groups must be interpreted carefully. I was disillusioned by the unexpectedly high percentage of infertile patients with PFs and PPs namely 42% (Fig. 1) which corresponds well with the findings of Masters and Johnson.[20] At the other end of the pendulum, Dubin and Amelar[21] and Amelar *et al.*[22] found that the general prevalence of PPs was 5,3% in their 1972 studies and 10% in their 1977 studies in a group of men complaining of infertility.

I found that PPs occurred among men more often than among women (Fig. 1). These figures emphasise certain facts; for instance (*i*) a detailed history must be taken from both husband and wife where there is a complaint of infertility; (*ii*) sufficient time must be allocated for consultations so that patients can gradually unwind emotionally and not curb their spontaneity and keep back information; and (*iii*) couples must be questioned separately as well as together because each partner may be restricted by a feeling of loyalty towards the other.

Table V shows the prevalence of the major PPs found among men complaining of infertility. Topping the list is impaired sexual interest. Another study of PPs among men,[21] indicates a much lower prevalence of this problem, namely 27,5%. The reason for this difference can probably be found in the fact that Dubin and Amelar[21] regarded those who had coitus once or less per month as having impaired sexual interest, whereas I regard this problem to exist, especially among couples complaining of infertility when coitus occurs once a week or less. MacLeod and Gold[23] recommend coitus three times a week or more for couples complaining of infertility, and a minimum of twice a week for couples of 'all ages'.

Dubin and Amelar[21] reported 39,1% of cases with erectile dysfunction and at a clinic for sexually transmissible diseases[18] erectile dysfunction varied between 5,6% and 18,9%. In this

study, however, the prevalence of erectile dysfunction occurred in 17,1% of cases.

As far as premature ejaculation is concerned, the 13,5% prevalence (Table V) compares well with the findings of other authors: 10,1%[21] and 20 - 40%.[18] Homosexuality occurred in 1,8% of cases. The fact that homosexuals still avoid disclosing their sexual tendencies also makes it difficult to obtain accurate information in an infertility clinic. In the general population the incidence of adolescent homosexuality was found to vary between 11% and 50% among boys and between 6% and 35% among girls. In adult men only rough estimates of between 25% and 33% could be made.[24]

Table VI shows the prevalence of PPs among women complaining of infertility. The most common problem was dyspareunia, followed by impaired sexual interest. No comparable figures either for the general population or any selected group, such as patients complaining of infertility, could be found in the literature.

In this study orgasmic dysfunction was considered to be present if orgasm occurred less than 4 times in 10 episodes of intercourse. On this scale 78,3% of the female patients reported good orgasmic function, despite the fact that dyspareunia, vaginismus and apareunia was present in this group (Table VI). Good orgasmic function was achieved by penis-clitoris, finger-clitoris, penis-vagina and oral-clitoris stimulation. Orgasm was never experienced by 7,8% of the women. In the general population the prevalence of lack of orgasmic experience is calculated to be between 10% and 15%.[18] The 21,7% of female patients who experienced orgasm 0 - 3 times out of 10, compares well with the prevalence of 17% in the general female population who 'rarely or never' experienced orgasm.[18]

Although lesbianism has been calculated to occur in 6 - 35% of the general female population,[24] it was present in only 0,2% of cases in this study (Table VI). This very low prevalence could also suggest, similarly to homosexuality, that information was deliberately withheld.

Apart from the fact that PPs can lead to infertility *per se*, these problems have a devastating influence on marriage. Although some authors[25] have found that emotional factors causing infertility occur in less than 5% of couples investigated, this study, which included all aspects of the examination of infertile couples and which was carried out according to international standards, has proved that PFs and PPs, caused emotional disturbances in 42,0% of patients.

In this study all the findings point towards an appalling neglect in sex education and counselling of infertile couples, and I am compelled to make an urgent plea for the establishment of a sex counselling clinic at every teaching hospital.

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